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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,253	04/05/2000	Gopal Parupudi	MSI-505US	7033

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EXAMINER

LY, ANH

ART UNIT PAPER NUMBER

2162

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/544,253	PARUPUDI ET AL.	
	Examiner	Art Unit	
	Anh Ly	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-64 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-36, 48-53, 58-60 and 62 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-23, 37-47, 52-57, 61, 63 and 64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/20/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is response to Applicants' RESPONSE filed on 01/20/2006.
2. Claims 1-8 and 10-64 are pending in this application.

Response to Arguments

3. Applicant's arguments, see RESPONSE, filed 01/20/2006, with respect to the rejection(s) of claim(s) 1-8, 10-19, 30-31, 37-43, and 54-57, 61 and 63-64 under Simonetti (US PATNO: 5,295,261) and Wang (US PATNO: 5,539,922) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US Patent No.: 5,671,225 issued to Hooper et al.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-8, 10-19, 37, 38-39, 40-43, 54, 55-56, 57, 61, and 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,295,261 issued to Simonetti in view of US Patent No. 5,539,922 issued to Wang and further in view of US Patent No.: 5,671,225 issued to Hooper et al. (hereinafter Hooper).

With respect to claim 1, Simonetti teaches one or more computer-readable media (storage medium includes disks and tapes: col. 1, lines 64-67); and

a hierarchical tree structure resident on the media and comprising multiple nodes (a hierarchical tree structure includes a plurality of nodes containing the attribute of country, states, counties, cities: col. 4, lines 6-34 and lines 65-67 and col. 5, lines 1-20).

Simonetti teaches computer readable storages including disks and tapes and a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of country, states, counties and cities. Simonetti does not clearly teach each of which represent geographical divisions of the Earth, individual nodes comprising an entity identification (EID), that is unique to the node, said multiple nodes comprising parent and children nodes, at least some of the parent nodes and their associated children nodes having EIDs that are unique for the associated node.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are

unique ID to the node. And in the level of states, the services for its telephone area code services, thus the parent and children nodes having a unique nodes or EID for the associated node (col. 8, lines 15-58 and col. 10, lines 3-50).

Therefore, based on Simonetti in view of Wang, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Simonetti and Wang, because using the steps of "each of which represent geographical divisions of the earth, ...EIDs serving as a basis, ... their associated children nodes having EIDs that are unique for the associated node", would have given those skilled in the art to have ability to include geographical divisions of the Earth in a hierarchical tree structure having nodes representing countries, states or cities. This gives users the advantage of determining the context or location of selected node in the tree structure. Simonetti and Wang do not teach attributes can be assigned to goods or services associated with an individual node.

However, Hooper teaches a memory storing the plurality of multimedia services in a hierarchical tree structure having nodes representing composite and services (fig. 3, abstract, col. 2, lines 35-40 and col. 4, lines 28-52).

Therefore, based on Simonetti in view of Wang, and further in view of Hooper, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Hooper to the system of Simonetti to include attributes being assigned to multimedia services to each individual node in a hierarchical tree structure. Because using the steps of "attributes can be assigned to goods or services associated with an individual node", would have given those skilled in

the art the tools to identify the multimedia services via a hierarchical tree structure having multiple nodes storing in the memory. The motivation being to providing interactive multimedia services using distributed computer network, thereby, reducing the processing time of accessing and transporting the content of multimedia over the computer system (Hooper's col. 1, lines 5-8 and col. 2, lines 28-48).

With respect to claims 2-8 and 10-19, Simonetti teaches one or more networks; wherein the nodes comprise political or natural entities, wherein the political or natural entities comprises one or more of the following: continents, countries, oceans, states, counties and cities; wherein the nodes comprise infrastructure entities; one or more of the following: postal codes, area codes and time zones; public places and non-physical entities (storing geographical information database: col. 4, lines 6-14; see abstract, col. 1, lines 60-68; col. 4, lines 6-14 and col. 8, lines 12-26; also see col. 13, lines 27-44; col. 8, lines 12-26; and abstract, figs. 3(A), 3(B) and 3(C), col. 8, lines 12-35 and col. 9, lines 1-28); wherein one of the attributes comprises a name attribute; a neutral ground truth name attribute; wherein one of the attributes comprises a geographic attribute; a latitude/longitude attribute; a relative importance index; a contextual parent attribute; a source attribute; a start/end dates attribute; a modification date attribute and a status attribute (col. 1, lines 60-68; col. 4, lines 6-14 and col. 8, lines 12-26; also see col. 13, lines 27-44; col. 8, lines 12-26; and abstract, figs. 3(A), 3(B) and 3(C), col. 8, lines 12-35 and col. 9, lines 1-28).

With respect to claim 37, Simonetti teaches accessing first and one or more second hierarchical tree structures that are resident on one or more computer-readable

media, each tree structure having multiple nodes, the nodes of the first hierarchical tree structure being associated with a first context (storage medium includes disks and tapes: col. 1, lines 64-67 and the first type of tree for hierarchically organized data with adjacent links list: col. 7, lines 51-58); and

traversing multiple nodes of at least of the tree structures to derive a context (navigating and searching the tree: col. 5, lines 1-20, col. 7, lines 51-58 and col. 8, lines 1-26).

Simonetti teaches computer readable storages including disks and tapes, type of data storing in hierarchical tree data structures. a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of country, states, counties and cities and a second tree (col. 8, lines 52-67). Simonetti does not clearly teach at least one-second hierarchical tree structure having multiple nodes associated with a second context; and at least one node from the at least one second hierarchical tree structure being linked with one node on the: first hierarchical tree structure by a link that is configured to enable a complete context to be derived from the first and second contexts, individual nodes having unique IDs that can serve as a basis, said multiple nodes comprising parent and children nodes, at least some of the parent nodes and their associated children nodes having EIDs that are unique for the associated node.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are

unique ID to the node. And in the level of states, the services for its telephone area code services, thus the parent and children nodes having a unique nodes or EID for the associated node (col. 8, lines 15-58 and col. 10, lines 3-50).

Therefore, based on Simonetti in view of Wang, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Simonetti and Wang, because using the steps of "each of which represent geographical divisions of the earth, ...EIDs serving as a basis, ... their associated children nodes having EIDs that are unique for the associated node", would have given those skilled in the art to have ability to include geographical divisions of the Earth in a hierarchical tree structure having nodes representing countries, states or cities. This gives users the advantage of determining the context or location of selected node in the tree structure. Simonetti and Wang do not teach attributes can be assigned to goods or services associated with an individual node.

However, Hooper teaches a memory storing the plurality of multimedia services in a hierarchical tree structure having nodes representing composite and services (fig. 3, abstract, col. 2, lines 35-40 and col. 4, lines 28-52).

Therefore, based on Simonetti in view of Wang, and further in view of Hooper, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Hooper to the system of Simonetti to include attributes being assigned to multimedia services to each individual node in a hierarchical tree structure. Because using the steps of "attributes can be assigned to goods or services associated with an individual node", would have given those skilled in

the art the tools to identify the multimedia services via a hierarchical tree structure having multiple nodes storing in the memory. The motivation being to providing interactive multimedia services using distributed computer network, thereby, reducing the processing time of accessing and transporting the content of multimedia over the computer system (Hooper's col. 1, lines 5-8 and col. 2, lines 28-48).

With respect to claims 38-39, Simonetti teaches a computer-implemented method as discussed in claim 37.

Simonetti teaches computer readable storages including disks and tapes, type of data storing in hierarchical tree data structures. a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of country, states, counties and cities and a second tree (col. 8, lines 52-67). Simonetti does not clearly teach a location context and geographical divisions of Earth.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are unique ID to the node (FIG. 22, Col. 2, lines 1-10, col. 18, lines 50-67 and col. 23, lines 60-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Simonetti with the teachings of Wang. One having ordinary skill in the art would have found it motivated to utilize the use of location and geographical division of the Earth having a plurality of nodes by which the attributes can be assigned to services for associated each individual

nodes having EIDs that are unique for the associated node as disclosed (Wang's figs. 1 & 5 and col. 8, lines 15-58 and col. 10, lines 3-50), into the system of Simonetti for the purpose of reducing the amount of modifications, the size of memory, thereby, providing the systems having various coverage areas more efficient (Wang's' col. 14, lines 28-40).

With respect to claims 40-43, Simonetti wherein the traversing derives a location context; wherein the nodes of the first hierarchical tree comprise geographical divisions of the Earth; wherein the nodes of the one or more second hierarchical tree comprise physical and/or logical entities; wherein the traversing comprises traversing at least one node on each tree to derive the context; wherein the context comprises a location and wherein the first and one or more second hierarchical tree structures comprise at least one node pair 14 that is linked (col. 1, lines 60-68; col. 4, lines 6-14 and col. 8, lines 12-26; also see col. 13, lines 27-44; col. 8, lines 12-26; and abstract, figs, 3(A), 3(B) and 3(C), col. 8, lines 12-35 and col. 9, lines 1-28).

With respect to claim 54, Simonetti teaches defining a hierarchical tree structure comprising multiple nodes that each can define a physical or logical entity (storage medium includes disks and tapes: col. 1, lines 64-67 and the first type of tree for hierarchically organized data with adjacent links list: col. 7, lines 51-58); and

traversing the multiple nodes (navigating and searching the tree: col. 5, lines 1-20, col. 7, lines 51-58 and col. 8, lines 1-26).

Simonetti teaches computer readable storages including disks and tapes, type of data storing in hierarchical tree data structures. a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of

country, states, counties and cities and a second tree (col. 8, lines 52-67). Simonetti does not clearly teach said multiple nodes comprising parent and children nodes, at least some of the parent nodes and their associated children nodes, at least some of the parent nodes and their associated children nodes having EIDs that are unique for the associated node.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are unique ID to the node. And in the level of states, the services for its telephone area code services, thus the parent and children nodes having a unique nodes or EID for the associated node (col. 8, lines 15-58 and col. 10, lines 3-50) and a plurality of nodes for a second tree having information of port (FIG. 22, Col. 2, lines 1-10, col. 18, lines 50-67 and col. 23, lines 60-67).

Therefore, based on Simonetti in view of Wang, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Simonetti and Wang, because using the steps of "each of which represent geographical divisions of the earth, ...EIDs serving as a basis, ... their associated children nodes having EIDs that are unique for the associated node", would have given those skilled in the art to have ability to include geographical divisions of the Earth in a hierarchical tree structure having nodes representing countries, states or cities. This gives users the advantage of determining the context or location of selected

node in the tree structure. Simonetti and Wang do not teach attributes can be assigned to goods or services associated with an individual node.

However, Hooper teaches a memory storing the plurality of multimedia services in a hierarchical tree structure having nodes representing composite and services (fig. 3, abstract, col. 2, lines 35-40 and col. 4, lines 28-52).

Therefore, based on Simonetti in view of Wang, and further in view of Hooper, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Hooper to the system of Simonetti to include attributes being assigned to multimedia services to each individual node in a hierarchical tree structure. Because using the steps of "attributes can be assigned to goods or services associated with an individual node", would have given those skilled in the art the tools to identify the multimedia services via a hierarchical tree structure having multiple nodes storing in the memory. The motivation being to providing interactive multimedia services using distributed computer network, thereby, reducing the processing time of accessing and transporting the content of multimedia over the computer system (Hooper's col. 1, lines 5-8 and col. 2, lines 28-48).

With respect to claims 55-56, Simonetti teaches a computer-implemented method as discussed in claim 54.

Simonetti teaches computer readable storages including disks and tapes, type of data storing in hierarchical tree data structures. a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of

country, states, counties and cities and a second tree (col. 8, lines 52-67). Simonetti does not clearly teach a location context and geographical divisions of Earth.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are unique ID to the node (FIG. 22, Col. 2, lines 1-10, col. 18, lines 50-67 and col. 23, lines 60-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Simonetti with the teachings of Wang. One having ordinary skill in the art would have found it motivated to utilize the use of location and geographical division of the Earth having a plurality of nodes by which the attributes can be assigned to services for associated'each individual nodes having EIDs that are unique for the associated node as disclosed (Wang's figs. 1 & 5 and col. 8, lines 15-58 and col. 10, lines 3-50), into the system of Simonetti for the purpose of reducing the amount of modifications, the size of memory, thereby, providing the systems having various coverage areas more efficient (Wang's' col. 14, lines 28-40).

With respect to claim 57, Simonetti teaches defining a hierarchical tree structure comprising multiple nodes that each can define a physical or logical entity (storage medium includes disks and tapes: col. 1, lines 64-67 and the first type of tree for hierarchically organized data with adjacent links list: col. 7, lines 51-58); and

traversing the multiple nodes (navigating and searching the tree: col. 5, lines 1-20, col. 7, lines 51-58 and col. 8, lines 1-26).

Simonetti teaches computer readable storages including disks and tapes, type of data storing in hierarchical tree data structures. a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of country, states, counties and cities and a second tree (col. 8, lines 52-67). Simonetti does not clearly teach said multiple nodes comprising parent and children nodes, at least some of the parent nodes and their associated children nodes, at least some of the parent nodes and their associated children nodes having EIDs that are unique for the associated node.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are unique ID to the node. And in the level of states, the services for its telephone area code services, thus the parent and children nodes having a unique nodes or EID for the associated node (col. 8, lines 15-58 and col. 10, lines 3-50) and a plurality of nodes for a second tree having information of port (FIG. 22, Col. 2, lines 1-10, col. 18, lines 50-67 and col. 23, lines 60-67).

Therefore, based on Simonetti in view of Wang, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Simonetti and Wang, because using the steps of "each of which represent geographical divisions of the earth, ...EIDs serving as a basis, ... their associated children nodes having EIDs that are unique for the associated node", would have given those skilled in the art to have ability to include geographical divisions of the

Earth in a hierarchical tree structure having nodes representing countries, states or cities. This gives users the advantage of determining the context or location of selected node in the tree structure. Simonetti and Wang do not teach attributes can be assigned to goods or services associated with an individual node.

However, Hooper teaches a memory storing the plurality of multimedia services in a hierarchical tree structure having nodes representing composite and services (fig. 3, abstract, col. 2, lines 35-40 and col. 4, lines 28-52).

Therefore, based on Simonetti in view of Wang, and further in view of Hooper, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Hooper to the system of Simonetti to include attributes being assigned to multimedia services to each individual node in a hierarchical tree structure. Because using the steps of "attributes can be assigned to goods or services associated with an individual node", would have given those skilled in the art the tools to identify the multimedia services via a hierarchical tree structure having multiple nodes storing in the memory. The motivation being to providing interactive multimedia services using distributed computer network, thereby, reducing the processing time of accessing and transporting the content of multimedia over the computer system (Hooper's col. 1, lines 5-8 and col. 2, lines 28-48).

With respect to claim 61, Simonetti teaches one or more computer-readable media (storage medium includes disks and tapes: col. 1, lines 64-67); and

a hierarchical tree structure resident on the media and comprising multiple nodes (a hierarchical tree structure includes a plurality of nodes containing the attribute of country, states, counties, cities: col. 4, lines 6-34 and lines 65-67 and col. 5, lines 1-20).

Simonetti teaches computer readable storages including disks and tapes and a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of country, states, counties and cities. Simonetti does not clearly teach each of which represent geographical divisions of the Earth, individual nodes comprising an entity identification (EID), that is unique to the node, EIDs serving as a basis said multiple nodes comprising parent and children nodes, at least some of the parent nodes and their associated children nodes having EIDs that are unique for the associated node.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are unique ID to the node. And in the level of states, the services for its telephone area code services, thus the parent and children nodes having a unique nodes or EID for the associated node (col. 8, lines 15-58 and col. 10, lines 3-50).

Therefore, based on Simonetti in view of Wang, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Simonetti and Wang, because using the steps of "each of which represent geographical divisions of the earth, ...EIDs serving as a basis, ... their associated children nodes having EIDs that are unique for the associated node", would

have given those skilled in the art to have ability to include geographical divisions of the Earth in a hierarchical tree structure having nodes representing countries, states or cities. This gives users the advantage of determining the context or location of selected node in the tree structure. Simonetti and Wang do not teach attributes can be assigned to goods or services associated with an individual node.

However, Hooper teaches a memory storing the plurality of multimedia services in a hierarchical tree structure having nodes representing composite and services (fig. 3, abstract, col. 2, lines 35-40 and col. 4, lines 28-52).

Therefore, based on Simonetti in view of Wang, and further in view of Hooper, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Hooper to the system of Simonetti to include attributes being assigned to multimedia services to each individual node in a hierarchical tree structure. Because using the steps of "attributes can be assigned to goods or services associated with an individual node", would have given those skilled in the art the tools to identify the multimedia services via a hierarchical tree structure having multiple nodes storing in the memory. The motivation being to providing interactive multimedia services using distributed computer network, thereby, reducing the processing time of accessing and transporting the content of multimedia over the computer system (Hooper's col. 1, lines 5-8 and col. 2, lines 28-48).

With respect to claim 63, Simonetti teaches accessing first and one or more second hierarchical tree structures that are resident on one or more computer-readable media, each tree structure having multiple nodes, the nodes of the first hierarchical tree

structure being associated with a first context (storage medium includes disks and tapes: col. 1, lines 64-67 and the first type of tree for hierarchically organized data with adjacent links list: col. 7, lines 51-58); and

traversing multiple nodes of at least of the tree structures to derive a context (navigating and searching the tree: col. 5, lines 1-20, col. 7, lines 51-58 and col. 8, lines 1-26).

Simonetti teaches computer readable storages including disks and tapes, type of data storing in hierarchical tree data structures. a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of country, states, counties and cities and a second tree (col. 8, lines 52-67). Simonetti does not clearly teach at least one-second hierarchical tree structure having multiple nodes associated with a second context; and at least one node from the at least one second hierarchical tree structure being linked with one node on the: first hierarchical tree structure by a link that is configured to enable a complete context to be derived from the first and second contexts, individual nodes having unique IDs that can serve as a basis, said multiple nodes comprising parent and children nodes, at least some of the parent nodes and their associated children nodes having EIDs that are unique for the associated node.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are unique ID to the node. And in the level of states, the services for its telephone area

code services, thus the parent and children nodes having a unique nodes or EID for the associated node (col. 8, lines 15-58 and col. 10, lines 3-50) and a plurality of nodes for a second tree having information of port (FIG. 22, Col. 2, lines 1-10, col. 18, lines 50-67 and col. 23, lines 60-67).

Therefore, based on Simonetti in view of Wang, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Simonetti and Wang, because using the steps of "each of which represent geographical divisions of the earth, ...EIDs serving as a basis, ... their associated children nodes having EIDs that are unique for the associated node", would have given those skilled in the art to have ability to include geographical divisions of the Earth in a hierarchical tree structure having nodes representing countries, states or cities. This gives users the advantage of determining the context or location of selected node in the tree structure. Simonetti and Wang do not teach attributes can be assigned to goods or services associated with an individual node.

However, Hooper teaches a memory storing the plurality of multimedia services in a hierarchical tree structure having nodes representing composite and services (fig. 3, abstract, col. 2, lines 35-40 and col. 4, lines 28-52).

Therefore, based on Simonetti in view of Wang, and further in view of Hooper, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Hooper to the system of Simonetti to include attributes being assigned to multimedia services to each individual node in a hierarchical tree structure. Because using the steps of "attributes can be assigned to

goods or services associated with an individual node”, would have given those skilled in the art the tools to identify the multimedia services via a hierarchical tree structure having multiple nodes storing in the memory. The motivation being to providing interactive multimedia services using distributed computer network, thereby, reducing the processing time of accessing and transporting the content of multimedia over the computer system (Hooper’s col. 1, lines 5-8 and col. 2, lines 28-48).

With respect to claim 64, Simonetti teaches access first and second hierarchical tree structures, each tree structure having multiple nodes, the nodes of the first hierarchical tree structure being associated with a first location context, the nodes of the second hierarchical tree structure being associated with a second location context, at least one node of the second hierarchical tree structure being linked with a node of the first hierarchical tree structure; and traverse at least one node of each tree structure to derive a location context (storage medium includes disks and tapes: col. 1, lines 64-67 and the first type of tree for hierarchically organized data with adjacent links list: col. 7, lines 51-58); and

traversing multiple nodes of at least of the tree structures to derive a context. (navigating and searching the tree: col. 5, lines 1-20, col. 7, lines 51-58 and col. 8, lines 1-26).

Simonetti teaches computer readable storages including disks and tapes, type of data storing in hierarchical tree data structures. a hierarchical tree structure storing in the storage medium containing a plurality of nodes containing the information of country, states, counties and cities and a second tree (col. 8, lines 52-67). Simonetti

does not clearly teach at least one-second hierarchical tree structure having multiple nodes associated with a second context; and at least one node from the at least one second hierarchical tree structure being linked with one node on the first hierarchical tree structure by a link that is configured to enable a complete context to be derived from the first and second contexts, individual nodes having unique IDs that can serve as a basis, said multiple nodes comprising parent and children nodes, at least some of the parent nodes and their associated children nodes having EIDs that are unique for the associated node.

However, Wang teaches a hierarchical tree structure representing geographical divisions of the Earth (figs. 1 & 5), each individual nodes representing an entity identification, such as in the level of country, MEXICO, USA and CANADA, these are unique ID to the node. And in the level of states, the services for its telephone area code services, thus the parent and children nodes having a unique nodes or EID for the associated node (col. 8, lines 15-58 and col. 10, lines 3-50) and a plurality of nodes for a second tree having information of port (FIG. 22, Col. 2, lines 1-10, col. 18, lines 50-67 and col. 23, lines 60-67).

Therefore, based on Simonetti in view of Wang, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of Simonetti and Wang, because using the steps of "each of which represent geographical divisions of the earth, ...EIDs serving as a basis, ... their associated children nodes having EIDs that are unique for the associated node", would have given those skilled in the art to have ability to include geographical divisions of the

Earth in a hierarchical tree structure having nodes representing countries, states or cities. This gives users the advantage of determining the context or location of selected node in the tree structure. Simonetti and Wang do not teach attributes can be assigned to goods or services associated with an individual node.

However, Hooper teaches a memory storing the plurality of multimedia services in a hierarchical tree structure having nodes representing composite and services (fig. 3, abstract, col. 2, lines 35-40 and col. 4, lines 28-52).

Therefore, based on Simonetti in view of Wang, and further in view of Hooper, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Hooper to the system of Simonetti to include attributes being assigned to multimedia services to each individual node in a hierarchical tree structure. Because using the steps of "attributes can be assigned to goods or services associated with an individual node", would have given those skilled in the art the tools to identify the multimedia services via a hierarchical tree structure having multiple nodes storing in the memory. The motivation being to providing interactive multimedia services using distributed computer network, thereby, reducing the processing time of accessing and transporting the content of multimedia over the computer system (Hooper's col. 1, lines 5-8 and col. 2, lines 28-48).

7. Claims 20-23, 44-47 and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,295,261 issued to Simonetti in view of US Patent No. 5,539,922 issued to Wang and further in view of US Patent No.: 5,671,225 issued to Hooper et al. (hereinafter Hooper) and US Patent No. 6,151,601 issued to Papierniak et al. (hereinafter Papierniak).

With respect to claims 20-23, Simonetti in view of Wang and Hooper teaches a system as discussed in claim 1.

Simonetti, Wang and Hooper disclose substantially the invention as claimed.

Simonetti, Wang and Hooper do not teach wherein the tree structure does not include any nodal associations with businesses or services; wherein the computer-readable media is embodied on a mobile computing device; wherein the computer-readable media is embodied on a handheld mobile computing device and wherein the computer-readable media is accessible to a mobile computing device via the Internet.

However, Papierniak teaches business context, wireless/mobile and Internet (abstract, col. 1, lines 10-40, col. 3, lines 56-67, col. 4, lines 1-67, col. 10, lines 8-67 and col. 11, lines 32-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Simonetti in view of Wang and Hooper with the teachings of Papierniak by incorporating the use of a system having multiple hierarchical tree structures for storing data. The motivation being to

improve the tree structure without the need to generate and store search table for each search value.

With respect to claims 44-47, Simonetti in view of Wang and Hooper teaches a system as discussed in claim 37.

Simonetti, Wang and Hooper disclose substantially the invention as claimed.

Simonetti, Wang and Hooper do not teach wherein at least one of the nodes of the one or more second hierarchical tree structures has a good or a service associated with it, and wherein the traversing comprises locating a good or a service associated with a node and consuming the good or service; wherein the accessing of the first and the one or more second hierarchical tree structures comprises accessing tree structures that are locally available on a mobile computing device; wherein the accessing of the first and the one or more second hierarchical tree structures comprises accessing at least one of the trees via a network medium; wherein the accessing of the first and the one or more second hierarchical tree structures comprises accessing at least one of the trees via the Internet.

However, Papierniak teaches business context, wireless/mobile and Internet (abstract, col. 1, lines 10-40, col. 3, lines 56-67, col. 4, lines 1-67, col. 10, lines 8-67 and col. 11, lines 32-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Simonetti in view of Wang and Hooper with the teachings of Papierniak by incorporating the use of a system having multiple hierarchical tree structures for storing data. The motivation being to

improve the tree structure without the need to generate and store search table for each search value.

With respect to claims 50-53, Simonetti in view of Wang and Hooper teaches a system as discussed in claim 48.

Simonetti, Wang and Hooper disclose substantially the invention as claimed.

Simonetti, Wang and Hooper do not teach wherein the computing device automatically determines its location context; wherein the computing device is a handheld computing device; wherein the computing device is a mobile computing device; wherein the computing device is a desktop device; and wherein the computing device is a handheld computing device that automatically determines its location context.

However, Papierniak teaches business context, wireless/mobile and Internet (abstract, col. 1, lines 10-40, col. 3, lines 56-67, col. 4, lines 1-67, col. 10, lines 8-67 and col. 11, lines 32-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Simonetti in view of Wang and Hooper with the teachings of Papierniak by incorporating the use of a system having multiple hierarchical tree structures for storing data. The motivation being to improve the tree structure without the need to generate and store search table for each search value.

8. Claims 24-36, 48-53, 58-60 and 62 are allowed.

Allowable Subject Matter

9. The following is a statement of reasons for the indication of allowable subject matter:

Claims 24-36, 48-53, 58-60 and 62 are allowed. Because “the first and the second hierarchical tree structure at least one node from the second hierarchical tree structure **being linked with one node** on the first hierarchical tree structure by **a link** that is configured to enable a complete context to be derived from the first and second contexts.”

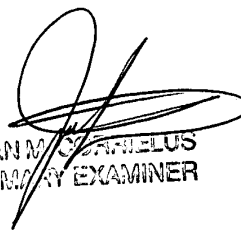
Contact Information


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV or fax to (571) 273-4039. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or **Primary Examiner Jean Corrielus (571) 272-4032**.

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Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to: **Central Fax Center: (571) 273-8300**


JEAN M. CORRIELUS
PRIMARY EXAMINER

ANH LY 
MAR. 17th, 2006